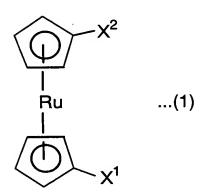
JC17 Rec'd PCT/PTO 03 JUN 2005

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CLAIMS

1. (Amended) A ruthenium compound for chemical vapor deposition which is at least one compound selected from the group consisting of a compound represented by the following formula (1):



wherein X¹ and X² are each independently a hydrogen atom, fluorine atom, trifluoromethyl group, pentafluoroethyl group or group represented by the following formula (1)-1:

$$-\operatorname{Si} \stackrel{R^1}{\underset{R^3}{\longleftarrow}} \dots (1)-1$$

wherein R^1 , R^2 and R^3 are each independently a hydrocarbon group having 1 to 10 carbon atoms,

with the proviso that X^1 and X^2 cannot be hydrogen atoms at the same time,

a compound represented by the following formula (2): $Ru(OCOR^4)_3$ (2)

wherein R^4 is a trifluoromethyl group or hydrocarbon group 20 having 1 to 10 carbon atoms, and three R^4 's may be the same or different,

and a compound represented by the following formula (4):

wherein Y is a cyclopentadienyl, cyclohexadienyl,

25 cycloheptadienyl, cyclooctadienyl, butadienyl or

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- 2,3-dimethyl-1,3-butadienyl group, L is a carbonyl group, methyl group or ethenyl group, n is an integer of 1 to 4, and m is an integer of 0 to 2, with the proviso that n+m is 3 or 4, and two L's may be the same or different when m is 2.
- 2. A process for producing a metal ruthenium film from the ruthenium compound of claim 1 by chemical vapor deposition.